REMARKS

Applicant has thoroughly considered the Office action dated June 19, 2007, and has amended the application to more clearly set forth the invention. The pending claims have been amended by this Amendment C. Reconsideration of the application as amended and in view of the following remarks is respectfully requested.

Amendments to the Claims

New claim 1 defines a computerised system for creating output video productions automatically from a body of input video material comprising multiple segments [see p7, final para]. As compared to previous claim 1 references have been added to the following items

- user-interface means enabling a user to combine said first descriptors in order to create at least one new descriptor [this is disclosed on P21, para 3: "creation of new descriptors by defining these descriptors as combinations of existing descriptors.". Also p21, para 4: "the system automatically calculates the value of this new descriptor for all segments of the video"]

- user-interface means enabling a user to choose one or more descriptors to be used for automatic segment selection; [Fig 9, step 902; p33, para 2: "choosing one or more of such descriptors to control the selection process."]

- user-interface means enabling a user to define a segment selection rule to be used for automatic segment selection; [Fig 9, step 904; p33, para 2: "Rules which govern how the descriptor values translate into selection decisions are then defined"; "The specification of the selection rules, for example the threshold value, and the way that this descriptor should logically combine with

other descriptors when several descriptors are used together in the selection process, is controlled through a user interface mechanism." [p11, 2nd last para]]

- playback means which plays said output production (to a screen); [Fig 3, step 314; p15, para 2: "The user then directs the system to play the selected segments in the sequence resulting from the previous step in a step 314 so that a new output video production created from the input video material is played". And p10, para 1: "At any time the user may view the output video production corresponding to the current set of selected segments in the current sequence."]

It is further specified that the set of features in claim 1 mean that a user can rapidly create and view different output productions by applying different combinations of descriptors and selection rules. [P6, para 3: "...the system may support a user who wishes to explore different ways in which a body of video material may be combined to form video productions... The system may further support a user who wishes to create video productions from a body of video material."; p22, 2nd last para: "... these derived descriptors at least provide useful ways for the user to explore different arrangements of the video material or a quickly produced approximation to an end result which the user may then refine."]

Further editorial amendments have been made to claim 1 for the sake of clarification. These include reverting to the original expression "input video material" rather than "input video signal". Corresponding amendments have been made to independent claims 24 and 47.

Corresponding amendments have been made to many of the dependent claims. Claims 19, 42 and 65 are withdrawn.

Summary of the invention as claimed in the new claims 1, 24 and 47

The invention as presently claimed in claims 1, 24 and 47 relates to a system. method and program product which acts on a body of video material which is divided into segments. The system performs signal analysis to obtain descriptor values, that is the

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values for each of a number of descriptors. The system permits a user to combine descriptors to form one or more new descriptors. The system permits a user to select which descriptors are used for selecting segments. The selected segments are put into a sequence according to the descriptor values, to produce an output production which is played back. If the user doesn't like the output production, he or she can modify the descriptors – including creating new descriptors using the previous descriptors - and see how the output production is modified. Thus, there may be an iterative procedure to produce an output production according to the user's tastes.

Rejections under 35 U.S.C. 112

Claim 61 has been amended to depend on claim 47, instead of 57.

Rejections under 35 U.S.C. 101

The examiner has rejected claim 1 and all of its dependent claims and claim 105 as non-statutory subject matter merely because they may "be implemented as software, or a computer program, executing on the computer". With respect, the applicant finds this objection hard to understand, since there is a wide body of case-law indicating that inventions which consist of computer programs, or computer-implemented methods, are patentable, provided that they produce a "useful, concrete and tangible result" (see below). Such inventions are often expressed in terms of an programmed computer system. The examiner's test, by contrast, would mean that no programmed computer could possibly be patentable, which, with respect, is obviously inconsistent with USPTO practice.

Similarly, claim 47 and all of its dependent claims and claim 117 are considered non-statutory subject matter merely "since the Applicant identifies the computer program product as a signal". Again, there is widespread acceptance that a computer

program product is statutory subject matter. An example of a computer program product is a floppy disk, which consists of a convention recording medium which is novel only in that from it can be read a signal encoding a program. All computer program products, both patentable and unpatentable, are thus, ultimately novel because of carrying a novel signal.

More specifically, claims 1 and 105 are directed to a system including various identified means. Claim 47 specifies computer readable program means embodied in a computer usable medium. Both categories are considered statutory under the guidelines of the USPTO.

Our understanding is that the present practice of the USPTO on the patentability of software inventions is as described in the Interim Guideline for Examination of Patent Applications for Patent Subject Matter Eligability. This document may be found at http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/guidelines101_20051026.pdf

Unsurprisingly, the legal test for patentability is unrelated to whether the Applicant has mentioned that a certain claim covers a "signal". Nor is it whether the invention may be implemented as software, or a computer program, executing on a computer.

Instead, following State Street Bank & Trust Co. v. Signature Financial Group Inc., 149 F. 3d 1368, 47 USPQ2d 1596 (Fed. Cir. 1998) and AT&T Corp. v. Excel Communications, Inc., 172 F.3d at 1373-74, 47 USPQ2d at 1601-02, the Guidelines indicate that the test is whether the invention produces a "useful, concrete and tangible result". See Section C.2 of the Guidelines, at page 20.

In the present case all of the claims are limited to apparatus, methods and computer program products which produce, as output, an edited video production. It is

submitted that no product of a computer system is ever more "useful, concrete and tangible" than this (the product of the claims in <u>State Street Bank</u> were just numbers; they were "useful, concrete and tangible" merely because they happened to describe the financial assets). An edited video is a "real world" item. It is, indeed, typically composed of images of the "real world". It may be viewed by multiple users, publicly broadcast, or sold. It interacts with real machinery (e.g. a home video system). A computer system accordingly to claims 1 and 105, irrespective of whether the programming is in ROM or RAM, is a commercial product which could enjoy a retail market. So might a computer program product such as a floppy disk which transforms a conventional computer into such a programmed computer system.

Rejections under 35 U.S.C. 102 (b)

The applicant's response to the office action mailed 7 March 2006, and the pre-appeal brief submitted on 1 February 2007, set out at some length why the applicant respectfully disagrees with the examiner's objections under this heading. We cannot find anywhere in the office action dated June 19, 2007, where the examiner addresses these objections.

It is true that in the latest office action, the examiner refers to MPEP 2144.04 III Automating a Manual Activity, and in particular to In re Venner 262 F. 2d 91, 95, 120 USPQ 193, 194 (CCPA 1958). However, this section of the MPEP refers to an objection of obviousness under 35 U.S.C. 103(b), <u>not</u> an objection under 35 USC 102. The examiner apparently accepts that Abecassis does not disclose automatic derivation of descriptors, which is required by claims 1, 24 and 47, and accordingly by their dependent claims. Accordingly, these claims are acceptable under 35 USC 102.

Furthermore, the applicant has, by the present amendments, amended all of claims 1, 24 and 47 to include the additional features described above.

Abecassis fails to disclose at least:

- user-interface means enabling a user to combine said first descriptors in order to create at least one new descriptor;
- that, a user can rapidly create and view different output productions by applying different combinations of descriptors and selection rules.

All of these features are required by newly presented claim 1 (and corresponding features are required by claims 26 and 47), and accordingly all of these claims, and the claims dependent thereto, are new in comparison to Abecassis.

The examiner's office action asserts (paragraph 2) that "Applicant's main argument is that Abecassis does not disclose any automatic process". However, the applicant respectfully points out that claims 105, 111 and 117 as previously presented did not contain this limitation, and that extensive arguments were presented in the pre-appeal brief submitted on 1 February 2007 to explain why these claims should not be rejected under 35 USC 102. These arguments are not mentioned, let alone responded to, in the Office action of June 19, 2007, and accordingly the examiner is requested to review these arguments and address them accordingly.

Rejections under 35 U.S.C. 103 (b)

The Office action dated 19 June 2007, as noted above, refers to MPEP 2144.04 III Automating a Manual Activity, and in particular to In re Venner 262 F. 2d 91, 95, 120 USPQ 193, 194 (CCPA 1958), which the examiner summarizes as indicating "that

providing an automatic means to replace a manual activity, which accomplishes the

same result, is not sufficient to distinguish over the prior art".

With respect, we point out, as mentioned in the appeal brief of February 1, 2007,

that this is simply not a proper description of the difference between the present

invention as described by previous claims 1, 26 and 47, and Abecassis. In Abecassis

certain descriptors (such as "profanity" or "violence") are applied by a manual process.

In the present invention, as previously defined, the descriptors were automatically

derived by computerized signal analysis, and were therefore <u>not the same descriptors,</u>

since the descriptors of Abecassis <u>cannot</u> be derived automatically. This is therefore not,

in the words of MPEP 2144.04 III, "accomplishing the same result". The invention as

expressed by claims 1, 26 and 47 *inevitably* produces a *different output production* from

that of Abecassis.

Nevertheless, by the present amendments the applicant has limited claims 1, 24
and 47.

Abecassis fails to disclose at least the following features added to claims 1, 24 and
47:

(a) user-interface means enabling a user to combine said first descriptors in order to
create at least one new descriptor;

(b) that a user can rapidly create and view different output productions by applying

different combinations of descriptors and selection rules.

The automatic creation of new descriptors using existing descriptors is absolutely alien

to Abecassis, in which the creation of descriptors is a manual activity, performed by an

expert. The descriptors are pre-selected (see Fig. 2A-2D) to represent fundamental

properties of the movie. Therefore, there is no reason why anyone should combine these

descriptors to form new descriptors (e.g. to form a single descriptor encoding both profanity and MPAA rating).

The user of the system of Abecassis, who is a home user who receives a recording in which pre-existing segments have already been coded manually for descriptor values, is not an expert at generating new descriptors, and therefore could not possibly perform the creation of new descriptors mentioned in step (a). He would have no reason to. In the context of Abecassis, the process of step (a) is therefore not obvious.

Nor, could such a user perform the recursive operation implied by (b), in which new output productions are created based on newly created descriptors. Nor would a user have any reason to do so. Nor would a reader of Abecassis ever conceive of giving the home-user this option. Therefore, in the context of Abecassis, the process implied in step (b) is also non-obvious.

As noted above, the examiner's office action asserts (paragraph 2) that "Applicant's main argument is that Abecassis does not disclose any automatic process". However, the applicant respectfully points out that claims 105, 111 and 117 as previously presented did not contain this limitation, and that extensive arguments were presented in the pre-appeal brief submitted on February 1, 2007, to explain why these claims should not be rejected under 35 USC 103. These arguments are not mentioned, let alone responded to, in the office action of June 19, 2007, and accordingly the examiner is requested to review these arguments and address them accordingly.

It is felt that a full and complete response has been made to the Office action, and applicant respectfully submits that pending claims are allowable over the cited art and that the subject application is now in condition for allowance.

The fact that applicant may not have specifically traversed any particular assertion by the Office should not be construed as indicating applicant's agreement therewith.

If helpful to advance this application, applicant suggests a conference call including the Examiner, applicant's undersigned attorney, applicant's local attorney and the applicant. However, since several of these individuals reside outside the United States, such a conference would need to be scheduled in advance.

Respectfully submitted,

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September 18, 2007

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